

Course Structure:

Scheme of Teaching and Examination

M.Sc. (Applied Electronics)

SEMESTER PATTERN

SEMESTER: FIRST

T: Lectures, P: Practical, TU: Tutorial/Assignment

		TOTAL	1 8	12	22	04	-	--	--	450	--	--	--	--	17 5	--

Total Credits: 26

1AE10Free Elective (Audit): 1AE101Electronic Devices & Components, 1AE102 Introduction to Lab Electronic Instruments

Scheme of Teaching and Examination
M.Sc. (Applied Electronics)
SEMESTER PATTERN
SEMESTER: SECOND

T: Lectures, P: Practical, TU: Tutorial/Assignment

S N	Subje ct Code	Name of Subject	Hrs/ Week		Credits		Examination Scheme								
							Theory					Practical			
			P a p e r T	M ax P/ TU	M ax Th eo ry	M ax In te rn al	Total	Min Passi ng Grad e Point s	M ax M ar ks	M ax M ar ks	To ta l	Mi n Pas sin g			
			H r s						Pr ac tic al	Int .As s			Gr ad e Poi nts		
1	2AE1	Linear Integrated Circuits	04	01	05		3	80	20	10 0	4	--	--	--	--
2	2AE2	Communication Engineering	04	01	05		3	80	20	10 0	4	--	--	--	--
3	2AE3	Digital Integrated Circuits	04	01	05		3	80	20	10 0	4	--	--	--	--
4	2AE4	Microprocessor and Microcontroller	04	01	05		3	80	20	10 0	4	--	--	--	--
5	2AE5 x	Professional Elective	04	01	05		3	80	20	10 0	4	--	--	--	--
6	2AE6	Integrated Circuits Laboratory		P 02		01	-	--	--	--	--	25	25	50	5
7	2AE7	Professional Elective Laboratory		P 02		01	-	--	--	--	--	25	25	50	5
8	2AE8	Microprocessor and Microcontroller Laboratory		P 02		01	-	--	--	--	--	25	25	50	5
9	2AE9	Basic Electronic Workshop		P 02		01	-	--	--	--	--	25	25	50	5

Total Credits: 29

2AE4x Professional Elective: 2AE51 Electronic Instrumentation, 2AE52 Control Systems

2AE10x Free Elective (Audit): 2AE101Introduction to MATLAB , 2AE102Environmental Studies

**Scheme of Teaching and Examination
M.Sc. (Applied Electronics)
SEMESTER PATTERN
SEMESTER: THIRD**

T: Lectures, P: Practical, TU: Tutorial/Assignment

S N	Subject Code	Name of Subject	Hrs/ Week		Credits		Examination Scheme								
							Theory				Practical				
			T	P/ T U	The or y	Pr ac tic al	P ap er H rs	M ax Th eo ry	M ax In te rn al	Tot al	Min Passin g Grade Points	M ax M ark s Pr act ica l	M ax M ark s Int . As s	To tal	M i n Pas sin g Gra de Poi nts
1	3AE1	Digital Communications	04	01	05		3	80	20	100	4	--	--	--	--
2	3AE2	Digital Signal Processing	04	01	05		3	80	20	100	4	--	--	--	--
3	3AE3	VLSI Design	04	01	05		3	80	20	100	4	--	--	--	--
4	3AE4 x	Professional Elective#1	04	01	05		3	80	20	100	4	--	--	--	--
5	3AE5 x	Professional Elective#2	04	01	05		3	80	20	100	4	--	--	--	--
6	3AE6	Digital Signal Processing Laboratory		P 02		01	-	--	--	--	--	25	25	50	5
7	3AE7	Professional Elective#1 Laboratory		P 02		01	-	--	--	--	--	25	25	50	5
8	3AE8	Project and Seminar		P 06		--	-	--	--	--	--	--	--	--	--
9	3AE9 x	Free Elective (Audit)	--	--	--	--	-	--	--	--	--	--	--	--	--
10	3AE10	Industrial visit/tour	--	--	--	--	--	--	--	--	--	--	--	--	--
		TOTAL	20	15	25	2	-	--	--	500	--	--	--	100	--

Total Credits: 27

3AE4x Professional Elective#1: 3AE41 Embedded System Design, 3AE42 Electronic Circuit Design

3AE5x Professional Elective#2: 3AE51 Introduction to Fuzzy Logic and Neural Networks, 3AE52 Computer Organization

3AE9x Free Elective (Audit): 3AE91 Industrial Management, 3AE92 IPR and Patents

**Scheme of Teaching and Examination
M.Sc. (Applied Electronics)
SEMESTER PATTERN
SEMESTER: FOURTH**

T: Lectures, P: Practical, TU: Tutorial/Assignment

S N	Subje ct Code	Name of Subject	Hrs/ Week		Credits		Examination Scheme							
							Theory				Practical			
			P	M	M	Tot	Min	Passin	M	M	M	To	Mi	n
			T	P/ T U	he or y	Pr ac tic al	H e o r s	Th eo ry	In te rn al	Grade Points	ax m ark s Pr act ica l	ax m ark s Int .As s	Tal	Pas sin g Gra de Poi nts
1	4AE1	Microwave Engineering	0 4	01	05		3	80	20	100	4	--	--	--
2	4AE2	Optical Fiber Communications	0 4	01	05		3	80	20	100	4	--	--	--
3	4AE3	Mobile Communications	0 4	01	05		3	80	20	100	4	--	--	--
4	4AE4 x	Professional Elective#1	0 4	01	05		3	80	20	100	4	--	--	--
5	4AE5 x	Professional Elective#2	0 4	01	05		3	80	20	100	4	--	--	--
6	4AE6	Microwave Engineering and Optical Fiber Communications Laboratory		P 02		01	-	--	--	--	--	25	25	50
7	4AE7	Professional Elective#1 Laboratory		P 02		01	-	--	--	--	--	25	25	50
8	4AE8	Project and Seminar		P 06		12	-	--	--	--	--	10 0	10 0	20 0
9	4AE9 x	Free Elective (Audit)	--	--	--	--	-	--	--	--	--	--	--	--
		TOTAL	2 0	15	25	14	-	--	--	500	--	--	--	30 0

Total Credits: 39

Grand Total of Credits: 121 for four semesters

4AE4x Professional Elective#1:4AE41 DSP with TMS 320C54xx, 4AE42 Digital Image Processing

4AE5x Professional Elective#2:4AE51 Smart Sensors, 4AE52 Biomedical Engineering

4AE9x Free Elective (Audit):4AE91 Engineering Ethics, 4AE92 Technical Writing

During tenure of the course, every student has to undertake laboratory course based on their common and special papers which cover experiments on Electrical Engineering & Network analysis, Electronic Devices and Circuits, Object Oriented Programming C++, Communications Skills, Integrated Circuits, Professional Electives, Microprocessor and Microcontroller, Basic Electronics Workshop, Digital signal Processing, Microwave Engineering and Optical Fiber Communications. The students have to complete a project work for successful completion of the course.